John N. Constantino, M.D.
M.I.N.D. Institute Distinguished Lecturer Series – April 14, 2010

Biographical Information
John N. Constantino, M.D., is the Blanche F. Ittleson Professor, and Director of the William Greenleaf Eliot Division of Child and Adolescent Psychiatry at Washington University School of Medicine. After receiving his undergraduate degree from Cornell University and his medical degree from the Washington University School of Medicine in St. Louis, Dr. Constantino completed a combined residency in pediatrics, general psychiatry, and child psychiatry at the Albert Einstein College of Medicine, Bronx, New York, and a postdoctoral research fellowship in psychiatric epidemiology at Washington University School of Medicine. Dr. Constantino’s work has involved the genetic epidemiology of social impairment in autism and the discovery of distinct patterns of familial aggregation of sub-clinical autistic traits in the relatives of children with autism. He has authored or co-authored over 50 original peer-reviewed papers in the scientific literature. He has pioneered the development of rapid quantitative methods for measuring inherited aspects of social impairment, which are currently in use worldwide and have contributed to new approaches to the search for genes that confer risk for autism and related disorders. His work also includes efforts to understand and prevent other abnormalities of early social development including antisocial behavior in children. Dr. Constantino currently holds grants from the National Institute of Child Health and Human Development, Autism Speaks, Simons Foundation, Centers for Disease Control and Prevention, and the Health Resources and Services Administration Maternal and Child Health Bureau, and has served on the scientific advisory committee for Autism Genetic Resource Exchange (a program of Autism Speaks) since 2005.

Presentation Abstract
4:30 p.m.
The Genetic Epidemiology of Autism
The past decade of autism research has substantially revised traditional understanding of the structure of symptoms and the mechanisms of inheritance of autistic syndromes. Population-based studies involving tens of thousands of children have now demonstrated that autistic symptoms exhibit a nearly-continuous distribution of severity in nature, and despite the substantial heritability demonstrated for this family of conditions, traditional approaches to gene-finding have failed to account for the majority of occurrences of autism and related disorders. This presentation re-examines the manner in which autistic symptoms—as they are currently understood—aggregate in the family members of individuals affected by autism. The results of the latest wave of large-scale studies have significant implications for understanding mechanisms of inheritance in autism, the manner in which genetic variation relates to behavioral variation, appropriate selection of subjects in genetic and neurobiologic research, and clearer understanding of what constitutes sibling “recurrence.” The latest data provide new perspectives on the relative proportions of autism cases in the general population that manifest distinct patterns of familial aggregation, and should alert clinicians to the presence of both clinical and sub-clinical autism spectrum disorder-related syndromes that occur in the siblings of children affected by autism.